# MultiModem® ZPX

V.92 Internal Modem

MT9234ZPX-UPCI-NV MT9234ZPX-PCIE MT9234ZPX-PCIE-NV

**Quick Start Guide** 



MultiModem ZPX Quick Start Guide V.92 Internal Modem MT9234ZPX-UPCI, MT9234ZPX-UPCI-NV MT9234ZPX-PCIE, MT9234ZPX-PCIE-NV 82100130L Rev. A

### Copyright

This publication may not be reproduced, in whole or in part, without prior expressed written permission from Multi-Tech Systems, Inc. All rights reserved.

Copyright © 2007 Multi-Tech Systems, Inc.

Multi-Tech Systems, Inc. makes no representations or warranty with respect to the contents hereof and specifically disclaims any implied warranty of merchantability or fitness for any particular purpose. Furthermore, Multi-Tech Systems, Inc. reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation of Multi-Tech Systems, Inc. to notify any person or organization of such revisions or changes. Check Multi-Tech's Web site for current versions of our product documentation.

Revision	Date	Description
Α	12/28/07	Initial release.

#### **Trademarks**

*Multi-Tech*, MultiModem, and the Multi-Tech logo are registered trademarks of Multi-Tech Systems, Inc. Windows 2000, 2003, XP, and Vista are registered trademarks of Microsoft in the U.S. and other countires. All other brand and product names mentioned in this publication are trademarks or registered trademarks of their respective companies.

#### **Patents**

This Product is covered by one or more of the following U.S. Patent Numbers: 6151333, 5757801, 5682386, 5.301.274; 5.309.562; 5.355.365; 5.355.653; 5.452.289; 5.453.986;7082106;7082141;7092406. Other Patents Pending.

# Technical Support Country

Europe, Middle East, Africa: U.S., Canada. all others:

### By Email

support@multitech.co.uk
support@multitech.com

### **Bv Phone**

+(44) 118 959 7774 (800) 972-2439 or +763-717-5863

### World Headquarters

Multi-Tech Systems, Inc. 2205 Woodale Drive Mounds View, Minnesota 55112 U.S.A. (763) 785-3500 or (800) 328-9717 Fax (763) 785-9874 http://www.multitech.com

### Introduction

This guide shows you how to set up your MultiModem ZPX. For detailed information, product specifications, troubleshooting tips, and more, see the User Guide, available on your MultiModem CD.

Check Multi-Tech's Web site for current versions of our product documentation.

# **Safety Warnings**

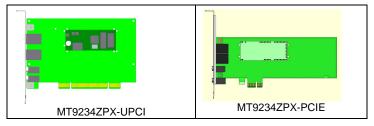
- Use this product only with UL- and CUL-listed computers.
- To reduce the risk of fire, use only UL-listed 26 AWG (.41mm) or larger telephone wiring.
- Never install telephone wiring during a lightning storm.
- Never install a telephone jack in a wet location unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- Avoid using a telephone during an electrical storm; there is a risk of electrical shock from lightning.
- · Do not use a telephone in the vicinity of a gas leak.
- The telephone cord is to be disconnected before accessing the inside of the equipment.

# **Package Contents**

- One MultiModem ZPX
- One RJ11 telephone cable
- · One printed Quick Start Guide
- One product CD
- One low profile mounting bracket (MT9234ZPX-PCIE models only)

# **Installing your MultiModem**

Installing the MultiModem requires you to open your system. Please consult your system manual in addition to the following instructions.

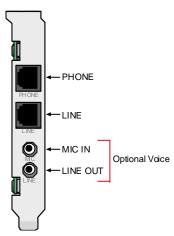


 Turn off your system and unplug it. Failure to do so may result in damage to both the MultiModem and your system. Do not turn on the system until the instructions tell you to do so.

- 2. Remove the cover from your system as instructed in the system manual.
- 3. If you are installing a MT9234ZPX-PCIE board in a low profile machine, you will have to change the mounting bracket to the low profile mounting bracket. Refer to your User Guide for low profile mounting bracket details.
- 4. Select an empty PCI expansion slot. Remove the expansion slot cover and save the retaining screw.
- Before handling the MultiModem, discharge static in your body by touching a
  bare piece of metal on the chassis. Carefully remove the MultiModem from its
  antistatic bag, handling it only by the mounting bracket and edges. Do not
  touch the gold-plated connectors along the bottom edge.
- Look at the system's main board to determine either PCI or Express connector. Place the MultiModem directly above the expansion slot and gently, but firmly, push it into the connector until the card's retaining bracket is flush against the system chassis.
- Fasten the retaining bracket to the system chassis with the screw saved in step 4.
- 8. Replace the system cover.

# **Making External Connections**

Now, connect the MultiModem to the telephone line and, optionally, to your telephone. For voice mail or speakerphone, you can also connect it to a microphone and an external speaker, headphone, or sound card. The microphone can be used for recording answering machine messages or for speakerphone use. The speaker or headphone can be used for playing back messages or as a speakerphone.



### **Line Connection**

Plug one end of the provided telephone cable into the modem's LINE jack, and the other end into a telephone wall jack. This is the only required connection.

*Important:* The LINE jack is not interchangeable with the PHONE jack. Do not plug the phone into the LINE jack or the line cable into the PHONE jack.

**Note:** The Federal Communications Commission (FCC) and Industry Canada impose certain restrictions on equipment connected to public telephone systems.

# **Phone Connection (Optional)**

If you wish to connect a telephone to the same line as the modem, plug it into the modem PHONE jack. *Important:* The PHONE jack is not interchangeable with the LINE jack. Do not plug the phone into the LINE jack or the line cable into the PHONE jack.

# Microphone/Headphone Connection (Optional)

For voice mail or speakerphone applications, plug an unamplified microphone into the MIC jack. The microphone and headphone should have a stereo 3.58mm (9/64-inch) mini plug. Do not use a monophonic microphone.

# **Installing the Modem Driver**

The MT9234ZPX drivers need to be installed in your computer's program directory. The procedure will be different depending on the operating system. The first section provides installation for the Vista Operating System. The second section provides installation for Windows 2000 thru Windows XP Operating Systems. If you use a Linux operating system, please refer to Appendix D in the User Guide for installation instructions.

# **Vista Operating System**

The MT9234ZPX driver installation is done in three parts, each directed by an installation wizard. The three parts are: (1) installation of your PCI Serial Port, (2) installation of the Communications Port, and (3) installation of the modem.

### **Preliminaries**

- Power up your computer.
- Windows will detect that the new modem is present.

## **Driver Installation of your PCI Serial Port**

The Found New Hardware screen appears with Windows needs to install driver software for your PCI Serial Port.



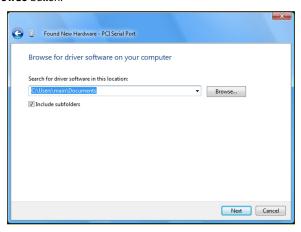
Click on Locate and install driver software (recommended). Windows will guide you through the process of installing driver software for your device.

4. The next screen prompts you to insert the disc that came with your PCI Serial Port. If you have the disc that came with your device, insert it now. Windows will automatically search the disc for driver software.



Click Next.

 Windows couldn't find driver software for your device screen appears. Choose Browse my computer for driver software (advanced).  At the Browse for driver software on your computer screen, click the Browse button.



- Select the **Drivers** folder, and then the **Vista** folder on the product CD. Click **Next**.
- 8. Searching D:\Drivers\Vista for software... screen appears.
- When the software for this device has been successfully installed screen appears with Windows has finished installing the driver software for this device: Multi-Tech's 1-Port PCI Analog Modem Card.



Click Close.

# **Installation of the Communications Port**

10. The **Found New Hardware – Multifunction Device** screen appears with Insert the disc that came with your Multifunction Device.



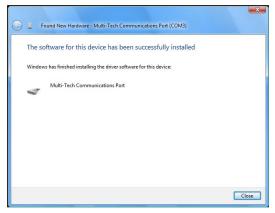
The MT9234ZPX-PCI product CD is still in the CDROM drive. Click Next.

- At the Windows couldn't find driver software for your device, click on Browse my computer for driver software (advanced). Locate and install driver software manually.
- At the Browse for driver software on your computer screen, click the Browse button and select the Drivers folder, then the Vista folder on the product CD.
- 13. Click Next.
- 14. Installing driver software... activity screen appears.
- Windows can't verify the publisher of this driver software screen appears.



Select Install this driver software anyway.

- 16. **Installing driver software** progress screen appears.
- The software for this device has ben successfully installed screen appears with Windows has finished installing the driver software for this device: Multi-Tech Communications Port.



Click Close.

## **Installation of the Modem**

 The Found New Hardware – MultiTech Systems MT9234ZPX-PCIE screen appears with Insert the disc that came with your MultiTech Systems MT9234ZPX-PCIE.



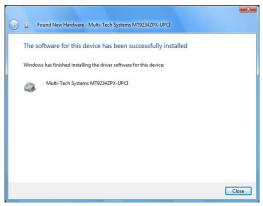
The MT9234ZPX-PCI product CD is still in the CDROM drive. Click Next.

- At the Windows couldn't find driver software for your device, click on Browse my computer for driver software (advanced). Locate and install driver software manually.
- At the Browse for driver software on your computer screen, click the Browse button and select the Drivers folder, then the Vista folder on the product CD.
- 21. Click Next.
- Windows can't verify the publisher of this driver software screen appears.



Select Install this driver software anyway.

- 23. **Installing driver software** progress screen appears.
- The software for this device has ben successfully installed screen appears with Windows has finished installing the driver software for this device: Multi-Tech Systems MT9234ZPX-PCIE.



25. Click Close. The installation of drivers is now complete.

# **Windows 2000 and XP Operating Systems**

The MT9234ZPX driver installation is done in three parts, each directed by an installation wizard. The three parts are: (1) installation of the Single-port UART PCI Card, (2) installation of the Communications Port, and (3) installation of the modem.

## **Preliminaries**

- 1. Power up your computer.
- 2. Windows will detect that the new modem is present.

# **Installation of the Single-Port UART PCI Card**

The wizard will install the files for the 1-port UART PCI Card.

- The Found New Hardware Wizard screen appears. In response to the question, "Can Windows connect to Windows Update to search for software?" select "No. not this time" and click Next.
- The next screen prompts you to insert the product CD into the computer. Insert the product CD, and select Install from a list or specific location (Advanced).



Click Next.

- At the Please Choose Your Search and Installation Options screen, select Search for the best driver in these locations and browse on the product CD to the Drivers folder and then the Windows\_XP\_2K folder. Select the relevent processor/operating system, AMD64, IA64, or X86. Click OK and click Next.
- A has not passed Windows logo testing screen appears. Click Continue Anyway.

- Note: This Microsoft operating system searches for a digital signature when you install any new hardware. If a "has not passed Windows logo testing" screen (or Digital Signature Not Found screen) appears, simply click Continue Anyway (or YES) to continue installation. Although Multi-Tech submits all eligible products to Microsoft for certification, the turn-around time is subject to many factors. Not having a digital signature does not affect product performance in any way.
- A Completing the Found New Hardware Wizard screen will appear.
   This wizard has finished installing the software for: Multi-Tech's 1-port UART PCI Card. Click Finish.

### **Installation of the Communications Port**

The wizard will install the files for the Multi-Tech Communications Port.

8. The Welcome to the Found New Hardware Wizard screen appears. This wizard helps you install software for: Multifunction Device. Select Install from a list or specific location (Advanced).



Click Next.

- At the Please Choose Your Search and Installation Options screen, select Search for the best driver in these locations and browse on the product CD to the Drivers folder. Select the relevent processor, AMD64, IA64, or X86. Click OK and click Next.
- A has not passed Windows logo testing screen appears. Click Continue Anyway. (See note on logo testing above.)
- A Completing the Found New Hardware Wizard screen will appear.
   This wizard has finished installing the software for: Multi-Tech
   Communications Port. Click Finish.

### **Installation of the Modem**

The wizard will install the file for Multi-Tech Systems MT9234ZPX Models.

 The Welcome to the Found New Hardware Wizard screen appears for a third time. This wizard helps you install the software for: Multi-Tech Systems MT9234ZPX-UPCI. Select Install from a list or specific location (Advanced).



Click Next.

- At the Please Choose Your Search and Installation Options screen, select Search for the best driver in these locations and browse on the product CD to the Drivers folder I multitech\_pcie\_upci-zpx.
- 14. A Completing the Found New Hardware Wizard screen will appear. The wizard has finished installing the software for: Multi-Tech Systems MT9234ZPX-UPCI. Click Finish.

The installation of drivers is now complete.

# **Configure the Modem for Your Country**

Different countries have different requirements for how modems must function. Therefore, before you use your modem, you must configure it to match the defaults of the country in which you are using it. The modem is set to country, Euro/NAM, with a country code of 52 decimal by default. You can use one of two configuration methods:

- Using the Global Wizard to Configure Your Modem
- Using AT Commands to Configure Your Modem

## **Using Global Wizard to Configure Your Modem**

The Global Wizard configuration utility is recommended for computers running Windows 2000 or newer.

- 1. Insert the MultiModem system CD into the CD-ROM drive.
- 2. When the splash screen appears, click *Initial Setup & Country Sel* button.
- Choose either:
  - Run Global Wizard from CD. This will not load the wizard onto your hard drive, or
  - Install Global Wizard on the HD. This will install the wizard onto your hard drive for future use.
- 4. The Global Wizard dialog box appears. Click Next.
- 5. The Wizard searches for your modem and identifies it. Click Next.
- 6. Select the country in which the modem will be used. Click Next.
- Review your choice of country. If it is correct, click *Next* to configure the modem.
- When Global Wizard announces that the parameters have been set, click Finish to exit.

# **Using AT Commands to Configure Your Modem**

Non-Windows users can configure the modem using AT commands. You must enter these commands in your communication program terminal window.

- Run your favorite communication program and open the program terminal window.
- 2. To configure the modem for a specific country:

Type **AT%T19,0,nn** (where **nn** is the country code in hexadecimal format Press ENTER.

The message **OK** displays.

3. To verify the change:

Type ATI9.

Press FNTFR.

The country code is displayed in decimal format, as in this example:

Country	AT command (hexadecimal)	Country code (decimal)
Euro/NAM	AT%T19,0,34 (default)	52

The complete list of country codes can be found on the Multi-Tech Web site at http://www.multitech.com/GlobalModem/config.

